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(74) Agent: **HIRANO, Kazuyuki**; Hirano Patent Office, 1-23-203, Tenjin 4-chome, Chuo-Ku, Fukuoka-Shi, Fukuoka, 8100001 (JP).

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(71) Applicant (*for all designated States except US*): **MAT-SUSHITA ELECTRIC INDUSTRIAL CO., LTD.** [JP/JP]; 1006, Oaza Kadoma, Kadoma-Shi, Osaka, 5718501 (JP).

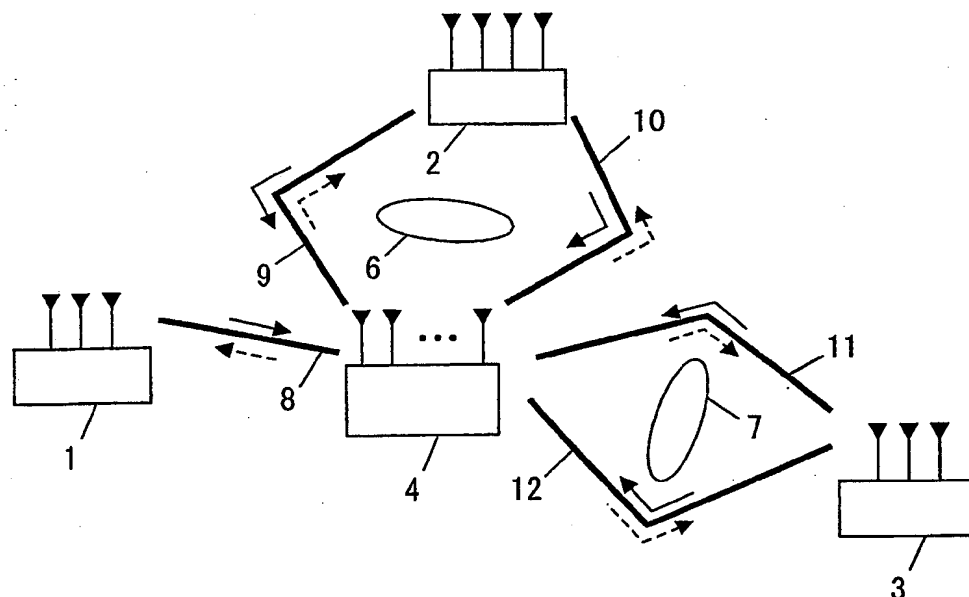
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(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **KOGA, Shouichi** [JP/JP]. **KONDO, Junji** [JP/JP].

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(54) Title: SPACE DIVISION MULTIPLEX WIRELESS COMMUNICATION SYSTEM, DEVICE AND METHOD FOR THE SAME



(57) Abstract: A wireless communication system comprises a base station (4) and terminals (1) - (3). The base station (4) and the terminals (1) - (3) perform a space division multiplex wireless transmission. Each of the base station (4) and the terminals (1) - (3) comprises a multi-beam antenna for a space division multiplex. A beam pattern formed by the multi-beam antenna of the base station (4) is orthogonalized based on transfer function values of a radio-wave-propagation characteristic formed between antenna elements of the multi-beam antenna of the base station (4) and antenna elements of multi-beam antenna of the terminals (1) - (3).

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